

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method of bonding at least two cured or ~~uncured~~-curable elastomeric layers, the method comprising placing an uncured elastomeric component (22) between the two elastomeric layers, and curing the elastomeric component (22) to bond the elastomeric layers together, wherein the method is characterized by forming the uncured elastomeric component (22) by
  - a) preparing two non-productive elastomer compounds (10, 12), wherein each non-productive compound (10, 12) is prepared with a co-reacting agent of a co-reacting cure package not added to the other non-productive compound (10, 12),
  - b) layering the non-productive elastomer compounds (10, 12) in at least eight alternating layers with a thickness relative to the diffusion rate of the co-reacting agents in each non-productive elastomeric layer to effect diffusion of the co-reacting cure agents through the adjacent layers.
2. (original) A method of bonding in accordance with claim 1 wherein the elastomeric component (22) achieves ninety percent cure, at a cure temperature of 120° C, in less than 30 minutes.
3. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement being characterized by preparing~~wherein the two non-productive compounds (10, 12) are prepared with identical compositions except for the co-reacting cure agents in each compound (10, 12).
4. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement being characterized by forming~~wherein each adjacent layer of the uncured elastomeric component (22) is formed with a thickness equal or less than 2 mm.
5. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement being characterized by layering~~ the two non-productive elastomer compounds (10, 12) being layered with differing thickness.
6. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement~~

- ~~being characterized by the method comprising the~~ further step of storing the two non-productive compounds (10, 12) for a period of time prior to layering.
7. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement being characterized by the method comprising the~~ further step of storing the layered uncured elastomeric component (22) for any period of time prior to placing the uncured elastomeric component (22) between the two elastomeric layers.
  8. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement being characterized by forming~~ the first non-productive compound (10 or 12) being formed with an absence of any accelerators found in the second non-productive compound (12 or 10) and ~~forming the~~ second non-productive compound (12 or 10) being formed with an absence of any sulfur vulcanizing agent found in the first non-productive compound (10 or 12).
  9. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement being characterized by forming~~ the first non-productive compound (10 or 12) being formed with 1 to 5 phr zinc oxide and 0 phr sulfur vulcanizing agent and ~~forming the~~ second non-productive compound (12 or 10) being formed with 0 phr zinc oxide and 0.2 to 8 phr sulfur vulcanizing agent.
  10. (currently amended) A method of bonding in accordance with claim 1, ~~the improvement being characterized by forming one non-productive elastomer compound (10 or 12) being formed~~ with a sulfur vulcanizing agent that is non-soluble when the two non-productive elastomer compounds (10, 12) are layered and which converts to a diffusable state prior to curing of the layered compound (22).
  11. (original) A method of bonding in accordance with claim 1, wherein the at least two elastomeric layers are two different components of an article selected from the group consisting of a passenger tire, an extended mobility tire, a truck tire, an earth mover tire, a retreaded tire, a belting, an airspring sleeve, or a rubber track.
  12. (original) A method of bonding in accordance with claim 1, the wherein the at least two

elastomeric layers are two different tire components.

13. (original) A method of bonding in accordance with claim 1, wherein the at least two elastomeric layers are a prepared tire carcass (106) and a pre-cured tire tread (104).
14. (currently amended) A method of bonding in accordance with claim ~~1~~213, the method being characterized by forming the uncured elastomeric component (102) immediately prior to inserting the elastomeric component (102) between the tire carcass (106) and the tire tread (104).
15. (currently amended) A method of bonding in accordance with claim ~~1~~213, the method being characterized by forming the uncured elastomeric component (102) at any time prior to inserting the elastomeric component (102) between the tire carcass (106) and the tire tread (104).
16. (currently amended) A method of bonding in accordance with claim ~~1~~213, the method being characterized by the further step of preheating the tire tread (104) prior to placing the tread (104) on the uncured elastomeric component (102).
17. (currently amended) A method of bonding in accordance with claim ~~1~~513, the method being characterized by curing the elastomeric component (102) at room temperature.
18. (original) A method of bonding in accordance with claim 1, the method being characterized by the co-reacting agents of the cure package being selected to produce an ultra fast cure.

The above amendments are supported by the original specification.